Pollution

UK government accused of pursuing 'gimmicks' to tackle air pollution

Green lawyers criticise government after it emerged experts were commissioned to explore whether high-tech paint could reduce NO2 levels

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The London skyline with the skyscrapers of the Canary Wharf business district shrouded in smog, 3 April 2014. Photograph: Lefteris Pitarakis/AP

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Lawyers have accused the government of pursuing gimmicks to tackle illegal air pollution, after it emerged experts were asked to examine whether high-tech paint could fix the problem.

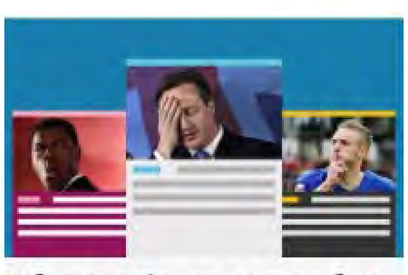
After losing a legal battle over pollution in the supreme court last year, the environment department last year announced plans for five clean air zones which will not affect nine in 10 vehicles.

But in their search for solutions, officials also commissioned a study by scientists into whether a type of paint could effectively reduce nitrogen dioxide (NO2), a toxic gas produced by diesel vehicles linked to thousands of premature deaths in London alone each year.

The Department for the Environment, Food and Rural Affairs (Defra) said it was unable to provide a figure for the cost of the study because the group that produced it is paid an annual fee for a series of reports.

When exposed to sunlight, titanium dioxide in the paint converts NO2 to a nitrate bound to the surface, which can then be washed off. But the report by the Air Quality Expert Group concluded that the paint would not make a dent in the UK's pollution problem.

"Taken as a whole, there is little current evidence to suggest the widespread use of photocatalytic surfaces will reduce ambient concentrations of NO2," the team of experts from King's College London, University of York and the University of Leeds found after analysing field trials.



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The problem, they said, was that the volumes of air that would make contact with the surfaces was not enough to have a significant impact on NO2 levels, which are in breach of European limits in dozens of cities including London, Birmingham, Manchester, Cardiff and Edinburgh.

Even worse, using such paint could have unwanted side effects. "Furthermore, there is a risk that these materials will result in the production of other undesirable species such as nitrous acid and formaldehyde, which can have wider impacts on atmospheric chemistry as well as adverse health impacts," the authors wrote in the report, which was quietly published in April.

Such an approach was much harder than tackling emissions at the tailpipe, they said. "Compared with emissions source control, reducing emissions once diluted in the atmosphere is challenging."

Alan Andrews, a lawyer at ClientEarth, which won the supreme court case and is taking the government to court again, said: "Research should be focused on cutting air pollution at source, not on gimmicks which seek to treat the symptoms but not the causes of Britain's air pollution crisis. The government is desperately trying to avoid tackling dirty diesel vehicles, which is why we're taking them back to court over their failure to clean up our air."

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MPs, green groups and thinktanks have proposed a range of measures to tackle "public health emergency" of air pollution, including a scrappage scheme for diesel cars, more clean air zones and greener public transport. Paint has not featured in the debate so far.

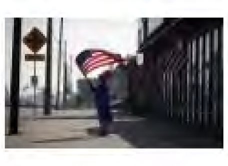
A Defra spokeswoman said the government was not looking at pursuing paint as part of its air quality plans. "The point of the report was to give us a better understanding of all available options to reduce nitrogen oxides (NOx) [which include NO2]," a spokeswoman said.

Parts of the UK are forecast to suffer moderate air pollution this week, although it is expected to largely clear by Friday.

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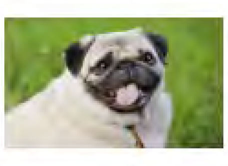
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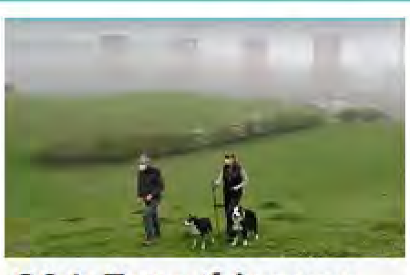

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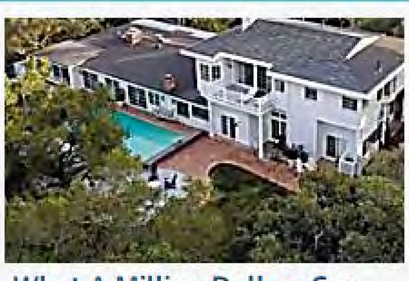
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Cut10T 7h ago 1

The greatest issue which I have is the these people at the top listen to advisor's from the industries which changes to stop CO2 emissions are going to impact.

There is innovation out here which I am confident will answer all the issues which London and other cities suffer from, without BEV plug ins which are questinably termed Zero emissions to the tail pipe.

Sorry any vehicle which burns hydrogen with a carbon content is not ever going to be low emissions and BEV Plugging into the grid is going to charge with anywhere around 60% fossil fuel and that presents worse emissions than the petrol engine.

As an individual innovator I am disenfranchised by the EU rules from entering Open Competitions held by Innovate UK (arm of Govt) and Horizon 2020 . Both of which awards £ millions to Corporations as a form of welfare. Daimler Adapting KERS from F1 to coaches to save 27% emissions from the diesel engine.

HyPulJet2.0 is a concept for a Hydrogen and Oxygen Pulse Jet Rotary Engine-generator, this will be a low-cost alternative to Hydrogen Fuel Cells for powering Zero emissions EVs. The lower manufacturing costs and using super capacitors instead of heavy costly Li-ion batteries will make Zero emissions EVs more affordable to buy.

Two improvements during 2015 make a substantial cut in fuel consumption, which allowed an on board fuel production system to be considered. The second improvement in December was a redesign of the engine which provided a separate drive to a dedicated generator to power the on board Hydrogen and Oxygen production system.

Having written to the Prime Minister and everyone down, re being disenfranchised from Open Competition for Funding, I am still chasing funding to cover a contract with a University to build a prototype engine and adapt a 4 wheel drive to electric.

In mind of this post I am confident that HyPulJet.2.0 will bring about all Zero emissions cars in London. That will also be the case with trucks and buses and all raod transport vehicles.

I would like to point out that taking an average UK house Off-rid with HyPulJet.2.0 will stop 5-6 Tonnes of CO2 emissions whilst changing a petrol to Zero emissions stops 1 Tonne of CO2 py.

No need for taxes and rules and regulations, provide funding to develop existing innovation and London will become Zero Emissions, with lower costs overall which will benefit the economy not tax it.

Best Regards

Al Scott

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valdez 7h ago 1

When the health benefits of outdoor exercise outweigh the harm caused by pollution, you can surmise that this is largely a manufactured moral panic.
http://www.theguardian.com/environment/2016/may/05/benefits-cycling-walking-outweigh-air-pollution-risk-cities
People use cars to display wealth, which causes far more offense than the damage of their emissions.

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